

REMARKS

Formal Matters

Claims 1, 2 and 4-36, as well as new claims 37-43 are pending.

Claims 1, 2 and 4-36 were examined. Claims 1, 2, 4-16 and 18-33 were rejected and claim 7 was objected to.

Claim 1, 4 and 27 have been amended to further clarify that fluid is dispensed from a single dispense of a group in any given movement along a selected path, such that as the head is moving over the substrate, fluid is not simultaneously dispensed from two or more of the dispensers of a given group. Support for this amendment can be found in Figures 4 and 5, as well as the accompanying description thereof in the specification, where it is clearly taught that as a group of dispensers is moved across a substrate, fluid is dispensed from only one of the dispensers of the group at any given time. Claims 9, 21 and 34 have been amended to positively recited the steps which the Examiner viewed as conditional in the previous set of claims. The amendments to the claims were made solely in the interest of expediting prosecution, and are not to be construed as an acquiescence to any objection or rejection. As no new matter is added by the above amendments, their entry by the Examiner is respectfully requested.

Claim objections

The objection to Claim 7 has been addressed by the above amendment.

Claim rejections under 35 U.S.C. § 102

Claims 1, 2, 4, 6-8, 14, 16-20, 27-29 34 and 35 have been rejected under 35 U.S.C. § 102(e) as assertedly being anticipated by Oyen.

With respect to Claims 1, 2, 4, 6-8, 14, 16-20, 27-29, all of these claims now include the requirement that only a single dispenser of any group actually dispense fluid droplets any given time during operation. In contrast, Oyen's "group" 16 of dispensers is employed such that all of the dispensers that are operational in the group dispense fluid during operation. See e.g., Figures 2 to 4, where all 7 operational dispensers of head (and assertedly "group") 16 are fired as the head passes across the substrate surface. Accordingly, Claims 1, 2, 4, 6-8, 14,

16-20, 27-29 are not anticipated by Oyen.

With respect to Claims 34 and 35, these claims have now been amended to positively recited what the Examiner viewed as conditional steps, in accordance with the Examiner's suggestion. It is believed that with this clarification, these claims are now clearly novel over the disclosure of Oyen.

Therefore, Claims 1, 2, 4, 6-8, 14, 16-20, 27-29 34 and 35 are not anticipated under 35 U.S.C. § 102(e) by Oyen and this rejection may be withdrawn.

Next, Claims 9, 11-13 and 21-25 have been rejected under 35 U.S.C. § 102(b) as assertedly being anticipated by Hickman. As the Applicant's have adopted the Examiner's suggestion to positively recite the limitations that were assertedly "conditional," this rejection may be withdrawn.

Next, Claims 27-29 have been rejected under 35 U.S.C. § 102(e) as assertedly being anticipated by Couwenhoven. As amended, these claims clearly require the processor to dispense fluid from only a single dispenser of a given group at any given pass over the substrate. A review of Couwenhoven fails to find a teaching or suggestion of this limitation. Accordingly, this rejection may be withdrawn.

Claim rejections under 35 U.S.C. § 103

Next, Claims 27-29 have been rejected under 35 U.S.C. § 103(a) as assertedly being obvious over Oyen. As amended, these claims clearly require the processor to dispense fluid from only a single dispenser of a given group at any given pass over the substrate. A review of Oyen fails to find a teaching or suggestion of this limitation. Accordingly, this rejection may be withdrawn.

Claim 26 was rejected under 35 U.S.C. § 103(a) as assertedly being obvious over Hickman. This rejection was based on the assumption that the following elements from Claim 21:

- (i) positions the head with a first row of each group aligned with the selected path for that group;
- (ii) moves the head with respect to the substrate while dispensing droplets from said second dispenser in the first row of the first group in accordance with a part of the pattern for the selected path for that group;
- (iii) re-positions the head such that a second row of each group is aligned with the selected paths; and
- (iv) moves the head with respect to the substrate while dispensing droplets from non-error dispensers in the second row of the first group in accordance with a part of the pattern for that group

were not positively recited in the Claim 21 and therefore not present in Claim 26. As these elements are now clearly positively recited, it is believed that this rejection may be withdrawn.

Next, Claims 5, 10, 15 and 22 have been rejected under 35 U.S.C. § 103(a) as assertedly being obvious over Oyen or Hickman in view of Gamble. As Gamble has been cited solely for the element of using a pulse-jet, Gamble fails to make up the above reviewed deficiencies in the primary references and it is therefore believed that this rejection may be withdrawn.

Finally, Claims 30 to 33 and 36 have been rejected under 35 U.S.C. § 103(a) as assertedly being obvious over Oyen in view of Bjornson, Heyneker, and Bao. As the supplemental references have been solely for the element of a biopolymer array, they fail to make up the above reviewed deficiencies in the primary reference and it is therefore believed that this rejection may be withdrawn.

CONCLUSION

The Applicants respectfully submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone Gordon Stewart at (650) 485 2386. The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§ 1.16 and 1.17 which may be required by this paper, or to credit any overpayment, to Deposit Account No. 50-1078.

Respectfully submitted,

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